AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions and listings of claims in the application:

1. **(Previously Presented)** A network tap that permits a remote computer to connect thereto, comprising:

a first port that can interface with a first segment of a network cable;

a second port that can interface with a second segment of a network cable, the first port and the second port permitting network data to be communicated between the first segment and the second segment;

a routing node that is in communication with the first port and the second port, the routing node being configured to pass network data between the first port and the second port, the routing node being further configured to insert data into the network data stream while avoiding data collisions within the network data stream;

an integrated circuit configured to communicate with the routing node between the first port and the second port such that the integrated circuit has access to the network data; and

a management port placed in communication with the integrated circuit, wherein the remote computer can be selectively connected to the management port to interact with the integrated circuit.

2. **(Original)** The network tap as recited in claim 1, wherein the integrated circuit is configured to control other components of the network tap.

3. **(Original)** The network tap as recited in claim 1, wherein the integrated circuit is configured to extract statistics from the network data.

4. **(Original)** The network tap as recited in claim 3, wherein the statistics include the percentage utilization of the network cable, existence of CRC errors, and address information of data packets.

5.   **(Original)**   The network tap as recited in claim 1, wherein the integrated circuit is programmable.

6.   **(Original)**   The network tap as recited in claim 1, wherein the integrated circuit comprises a microprocessor.

7.   **(Original)**   The network tap as recited in claim 1, wherein the integrated circuit comprises a field programmable gate array.

8.   **(Original)**   The network tap as recited in claim 7, wherein the field programmable gate array comprises:

a process module;

a memory; and

at least one buffer.

9.   **(Previously Presented)**   The network tap as recited in claim 1, further comprising:

a tap port through which a copy of the network data can be transmitted to an attached device and wherein the routing node is in communication with the tap port and is configured to transmit device data received from the attached device by way of the tap port to one of the first and second ports.

10.   **(Canceled)**

11.   **(Previously Presented)**   The network tap as recited in claim 9, wherein the integrated circuit is configured to control the routing node between:

an enable mode in which the routing node is enabled to receive kill packets(s) from the attached device and to communicate the kill packets(s) through at least one of the first port and the second port; and

a disable mode in which the routing node is disabled from communicating kill packets(s) through either the first port and the second port.

12.   **(Previously Presented)**   The network tap as recited in claim 1, wherein the integrated circuit and routing node are implemented together as a field programmable gate array.

13.   **(Previously Presented)**   The network tap as recited in claim 11, wherein the field programmable gate array comprises a first buffer for receiving the kill packets(s) and a second buffer for receiving the network data, the first buffer and the second buffer cooperating to insert the kill packets(s) onto the network cable without interfering with the network data.

14.   **(Currently Amended)**   In a network tap that passes network data between a first port and a second port by way of a routing node that is in communication with the first and second ports, the network tap comprising an integrated circuit for permitting a remote computer to communicate with a node of a network in order to access the network data, a method for obtaining statistics about the network data, comprising:

at the integrated circuit:

storing the network data;

analyzing the network data so as to obtain statistics concerning the network data;

storing the analysis of the network data;

receiving a request by the remote computer for at least one of the network data and the analysis of the network data;

retrieving the requested data; and

sending the requested data to the remote computer; and

at the routing node, performing the following upon satisfaction of one or more conditions:

receiving a data packet from a device communicatively coupled with the network tap; and

inserting the received data packet into the network data, the data packet being inserted in such a way that collisions between the inserted data packet and the network data are avoided.

15.   **(Original)**   The method as recited in claim 14, further comprising using the analysis of the network data stored in the integrated circuit to control other components of the network tap.

16.   **(Currently Amended)**   The method as recited in claim 14, wherein storing the network data comprises storing the network data in a [[rust]] <u>first</u> buffer located in the integrated circuit.

17.   **(Original)**   The method as recited in claim 16, wherein analyzing the network data comprises analyzing the network data stored in the first buffer.

18.   **(Original)**   The method as recited in claim 17, wherein storing the analysis of the network data comprises storing the analysis of the network data in a memory located in the integrated circuit.

19.   **(Original)**   The method as recited in claim 18, wherein retrieving the requested data comprises retrieving the requested data from the memory and sending the requested data to a second buffer located in the integrated circuit.

20.   **(Previously Presented)**   The method as recited in claim 14, wherein analyzing the network data comprises determining at least one of:
        the packet size of the network data;
        CRC errors in the network data; and
        priority level of the network data.

21.   **(Original)**   The method as recited in claim 14, further comprising updating a statistics table.

22.   **(Original)**   The method as recited in claim 14, wherein the integrated circuit is a field programmable gate array.

23.   **(Previously Presented)**   A network tap that permits network data to flow therethrough, comprising:

a first network port that can receive an end of a first segment of a network cable;

a second network port that can receive an end of a second segment of a network cable, the first port and the second port permitting network data to be communicated between the first segment and the second segment;

at least one tap port that can be connected to an attached device, the at least one tap port permitting a copy of the network data to be transmitted to the attached device and further receiving kill packet(s) from the attached device;

at least one management port that can be connected to a remote computer, the at least one management port permitting access to the network data and further receiving management data from the remote computer;

a routing node that is in communication with the first port, the second port, the at least one tap port and the at least one management port, the routing node being configured to:

pass network data between the first port and the second port; and

transmit kill packets(s) from the at least one tap port to at least one of the first network port, the second network port and the at least one management port; and

an integrated circuit configured to communicate with the routing node and the management port.

24.   **(Original)**   The network tap as recited in claim 23, wherein the routing node is an Ethernet switch.

25.   **(Original)**   The network tap as recited in claim 23, wherein the integrated circuit is a microprocessor.

26.   **(Original)**   The network tap as recited in claim 23, wherein the integrated circuit is a field programmable gate array.

27.   **(Original)**   The network tap as recited in claim 23, wherein the integrated circuit provides the functions of the routing node.

28.   **(Original)**   The network tap of claim 27, wherein the integrated circuit includes a first buffer for receiving the device data and a second buffer for receiving the network data, the first buffer and the second buffer cooperating to insert the device data onto the network cable without interfering with the network data.

29.   **(Original)**   The network tap as recited in claim 23, wherein the integrated circuit is configured to obtain statistics about the network data.

30.   **(Original)**   The network tap of claim 23, further comprising a first communication line from the first port to the routing node and a second communication line from the second port to the routing node, each of the first communication line and the second communication line including:

a relay for circumventing the routing node in the event of loss of power at the network tap;

a transformer; and

a fan out buffer that propagates the network data to the routing node and propagates a copy of the network data to the at least one tap port.

31.   **(Original)**   The network tap of claim 23, further comprising a switch for combining network data received by the network tap at the first port and network data received by the network tap at the second port into a single signal that can be delivered to the at least one tap port.

32.   **(Original)**   The network tap of claim 31, wherein the integrated circuit is configured to control the routing node and the switch to allow the at least one tap port to be connected to different attached devices.

33.   **(Previously Presented)**   The network tap of claim 1, wherein the node is configured to receive a kill packet from the remote computer through the management port and integrated circuit and insert the kill packet into the network data stream.

34.   **(Previously Presented)**   The network tap of claim 33, wherein the kill packet comprises a firewall reset command.

35.   **(Previously Presented)**   The network tap of claim 1, wherein the integrated circuit is programmable and/or upgradable through the remote computer.